

# KEVIN BOR-KAE HWANG

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## OBJECTIVE

A software engineer with Database, Web-App, and general programming skills looking for full-time position, graduating April 2018

## EDUCATION

### University of Michigan

Sep. 2016-Present

Master, Electrical and Computer Engineering (Signal Processing and Machine Learning) (GPA: 3.8)

Ann Arbor, MI

- Expected Graduation: April 2018
- Courses: Operating Systems, Database Management Systems, Machine Learning, Self-Driving Car, Big Data System, Matrix Methods, Probability and Random Process

### National Tsing Hua University

Sep. 2011-Jun. 2015

Bachelor, Electrical Engineering (Signal Processing) (GPA: 4.05/4.3, overall class ranking: 1/56)

Hsinchu, Taiwan

- Won the Academic Achievement Award (top 3 students in fall 2012)
- Courses: Digital Signal Processing, Operating Systems, Data Structures, Computer Architecture, Signals and Systems

## WORK EXPERIENCE

### Clinc Inc.

May. 2017-Aug. 2017

Software Engineer, Finie for the Family back-end team (14 weeks)

Ann Arbor, MI

- Built a monthly budget tracking feature for conversational AI assistant, allow user to manage personal budget by spoken language
- Created a family assistant for managing budget, shopping list, and notification through spoken language
- Used Python for back-end logic computation; utilized Django framework to interact with MySQL database
- Designed a web-based chatbot interface by HTML, CSS, JS

## PROJECTS

### Front-End Web Design: Starkque

Feb. 2017-Present

- Initiated a web-app with log-in system, users can play games, post photos, and send messages; implemented with HTML, CSS, JS
- Implemented responsive web design for all size of device screens with Bootstrap
- Established back-end support with MySQL and PHP

### Multi-class AdaBoost Algorithms Comparison

Nov. 2016-Dec. 2016

- Programmed 3 different versions of AdaBoost algorithm (M1, M2, SAMME) with Matlab
- Built decision tree as weak learner for AdaBoost algorithms
- Investigated the pros and cons of AdaBoost algorithms; M2 is accurate for small dataset with few classes, SAMME is fast with large dataset

### 2D Indoor Positioning System through Android Game App

Jan. 2014-Jan. 2015

- Developed Android game app to demonstrate player's movement in real-time, with 1s latency
- Implemented RSSI and INS as measurement for distance achieving 20% improvement in accuracy with Kalman filter
- Awarded research funding for honorable recognition from National Science Council (NSC) in Taiwan

### Augmented Reality Implementation with Box Man

Dec. 2014-Jan. 2015

- Implemented coordinate transformation from real world to virtual world by OpenCV
- Used Webcam to capture real-world image and projected virtual character moving with 3 dimensions
- Designed three control modes "walk", "skate", and "teleport"

## SKILLS

**Language:** Python, Ruby, Java, C/C++, Swift

**Database:** SQL, Oracle SQL\*Plus, MySQL

**Web:** HTML, CSS, JavaScript (jQuery), Bootstrap, PHP

**Tool:** Linux, Git, MATLAB

## LEADERSHIP

### Prime Organizer, Graduate Student Association Activity Department

Nov. 2014-Jun. 2015

- Coordinated Escape Room; attracted over 200 participants and generated over \$1000 revenue

### President, NTHU HSNU&ZS Alumni Association

Aug. 2012-Aug. 2013

- Elected by over 100 members as president and organized 12 activities annually aiming to enhance connections among over 200 alumni
- Organized 3 large events: summer camp, campus tour, Christmas carnival, over 200 participants in each event

### Delegate, 24th World Model United Nations, Seoul, Korea

Mar. 2015

- Won opportunities against over 100 candidates to debate as school delegation, and collaboratively produced a resolution on water sanitation issues in Model United Nations ESCAP (Economic and Social Commission for Asia and the Pacific)